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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/037,096	10/22/2001	Patrick G. Xavier	SD6851/S96528	5879
20567	7590 01/31/2006		EXAMINER	
SANDIA CO P O BOX 580	ORPORATION		GUILL, RU	JSSELL L
MS-0161	O .		ART UNIT	PAPER NUMBER
ALBUQUERO	QUE, NM 87185-0161		2123	

DATE MAILED: 01/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	A ulta - Ata Ma	A multipopulation				
	Application No.	Applicant(s)				
Office Action Summer	10/037,096	XAVIER ET AL.				
Office Action Summary	Examiner	Art Unit				
	Russell L. Guill	2123				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 16(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 16 De	ocember 2005					
· <u> </u>	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
closed in accordance with the practice under L	x parte Quayle, 1955 C.D. 11, 40	03 O.G. 213.				
Disposition of Claims						
4)⊠ Claim(s) <u>1-24</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5)⊠ Claim(s) <u>13-23</u> is/are allowed.						
6)⊠ Claim(s) <u>1-12 and 24</u> is/are rejected.						
7) ☐ Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	election requirement.					
· · · · · · · · · · · · · · · · · · ·						
Application Papers						
9) The specification is objected to by the Examiner.						
10) $\boxtimes$ The drawing(s) filed on <u>22 October 2001</u> is/are: a) $\boxtimes$ accepted or b) $\square$ objected to by the Examiner.						
Applicant may not request that any objection to the	- · ·					
Replacement drawing sheet(s) including the correcti						
11) The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12) ☐ Acknowledgment is made of a claim for foreign a) ☐ All b) ☐ Some * c) ☐ None of:	priority under 35 U.S.C. § 119(a)	)-(d) or (f).				
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the prior	ity documents have been receive	ed in this National Stage				
application from the International Bureau	(PCT Rule 17.2(a)).					
* See the attached detailed Office action for a list of the certified copies not received.						
Mark (A)						
Attachment(s)	, <b>–</b>	1770				
Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail Da					
Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	5) 🔲 Notice of Informal P	atent Application (PTO-152)				
Paper No(s)/Mail Date	6) Other:					

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#### **DETAILED ACTION**

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1. This Office Action is in response to an amendment filed December 16, 2005. Claims 1-2, 4, 13-14, 16 and 23-24 were amended. No claims were canceled. Claims 1-24 are pending. Claims 1-24 have been examined. Claims 13-23 are allowable. Claims 1-22 and 24 have been rejected.

## Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

- 3. Claims **1 12 and 24** are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.
  - a. Regarding **claims 1 12 and 24**, the claims do not appear to produce a useful and tangible result to form the basis of a practical application needed to be statutory (Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility, IV, C, 2, b).

## Allowable Subject Matter

- 4. Claims 13 23 are allowable.
- 5. The following is an Examiner's statement of reasons for allowance:
  - a. While Dixon, Buschmann and Tanenbaum teach a computer-based apparatus for accommodating interaction phenomena in a data-flow-based simulation of a system of elements, neither of these references taken either alone or in combination with the prior art of record teach a computer-based apparatus for

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accommodating interaction phenomena in a data-flow-based simulation of a system of elements specifically including: a first group of instructions for causing the processor to establish a plurality of meta-modules simulating an element in the system of elements; and a second group of instructions for causing the processor to establish a plurality of world modules associated with respective ones of one or more interaction phenomena such that each of the plurality of world modules is associated with a proxy module from each meta-module of a group of the plurality of meta-modules, the group being associated with one of the one or more interaction phenomena, the proxy module from each meta-module of the group forming a grouping of proxy modules; in combination with the remaining elements and features of the claimed invention. It is for these reasons that the Applicant's invention defines over the prior art of record.

### Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Russell L. Guill whose telephone number is 571-272-7955. The examiner can normally be reached on Monday – Friday 10:00 AM – 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on 571-272-3749. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Any inquiry of a general nature or relating to the status of this application should be directed to the TC2100 Group Receptionist: 571-272-2100.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Russ Guill Examiner Art Unit 2123

RG

Primary Examiner Art Unit 2125